

REMARKS

In the present amendment, applicant amends Claims 2, 5 and 12-16, cancels Claims 8 and 9 without prejudice, and adds new Claims 17-19. A marked up copy of the amended claims in Appendix A.

35 USC §103 Rejections.

The Examiner rejected claims 2, 5, and 12-14 under 35 USC §103(a) as being unpatentable over Ramel (US 5,864,577) in view of Chen et al. (US 6,215,777).

The Examiner states that *Ramel* discloses all of the subject matter claimed in Applicant's claims 2, 5, and 12-14 except for specifically teaching the modulator and a scrambling means as recited in the respective claims.

Applicant claims in amended claim 2, "...a scrambling means for scrambling a subset of bits in the modulated data....transmission at a random frequency determined in accordance⁴ with a selection signal, wherein the selection signal is determined in accordance with the scrambled subset of bits." Applicant claims in amended claim 13, "...modulating the data; scrambling a subset of bits of the modulated data; selecting a carrier frequency in accordance with the modulated, scrambled subset of bits..."

Ramel discloses, "To organize the spreading operations, the control circuit 2 has the list of the frequencies and the codes to be used as well as the laws of application of these frequencies and these codes. In other words, it memorizes the characteristics of the standard sub-packet referred to here above. It may thus organize the operations so that, as seen further above, the spread characteristics of the sub-packets that will be transmitted correspond to those of the standard sub-packets." (*Ramel*, figure 5, col. 6, lns. 25-33) Thus *Ramel* discloses introducing data bits to be transmitted into the control circuit to "...provide groups of bits B, each corresponding to the bits of a segment to be transmitted and, with each group, a signal C and a signal F respectively representing

the spreading code and the frequency to be used for transmission of the group considered (*Ramel*, figure 5, col. 6, Ins. 37-41). *Ramel* does not suggest nor teach Applicant's claim for a scrambled subset of bits to randomize a carrier frequency selection method.

Chen discloses, "...spreading means 58a-58n are provided to a corresponding scrambling means 62a-62n scramble the data in accordance with scrambling sequence provided by PN generators." (*Chen*, col. 7, Ins. 24-29) *Chen* does not teach nor suggest, combining the disclosed scrambling means of *Chen* with the frequency selection method of *Ramel*, to obtain a random carrier frequency as in Applicant's amended claims 2 and 13. *Ramel* selects its carrier frequency from an incoming data packet and scrambling would not benefit this pre-determined frequency selection plan and, arguendo, if it did, *Ramel* would have to change the way it selects the carrier frequency from its pre-determined frequency selection plan using incoming data. Thus, there is no motivation to combine the scrambling means of *Chen* with the manner of frequency selection disclosed in *Ramel*. Even to do so would require that the frequency selection method disclosed in *Ramel* be significantly modified and/or portions eliminated to function.

Applicant claims in amended claim 5, "... scrambling a subset of bits in the modulated data...wherein the code channel selection signal is determined in accordance with the scrambled subset of bits." Applicant claims in amended claim 14, "... scrambling a subset of bits of the data; modulating the data in accordance with a code channel selection signal that is determined in accordance with the scrambled subset of bits"

Ramel discloses "[t]o organize the spreading operations, the control circuit 2 has the list of the frequencies and the codes to be used as well as the laws of application of these frequencies and these codes. In other words, it memorizes the characteristics of the standard sub-packet referred to here above. It may thus organize the operations so

that, as seen further above, the spread characteristics of the sub-packets that will be transmitted correspond to those of the standard sub-packets.” (*Ramel*, figure 5, col. 6, Ins. 25-33) Thus *Ramel* discloses introducing data bits to be transmitted into the control circuit to “provide groups of bits B, each corresponding to the bits of a segment to be transmitted and, with each group, a signal C and a signal F respectively representing the spreading code and the frequency to be used for transmission of the group considered (*Ramel*, figure 5, col. 6, Ins. 37-41). *Ramel* does not suggest nor teach Applicant’s claim in claim 5 and 14, for a scrambled subset of bits to randomize the code channel selection signal determination.

Chen discloses, “. . . spreading means 58a-58n are provided to a corresponding scrambling means 62a-62n scramble the data in accordance with scrambling sequence provided by PN generators.” (*Chen*, col. 7, Ins. 24-29) *Chen* does not teach nor suggest, combining the disclosed scrambling means of *Chen* with the code selection method of *Ramel*, for to randomly select code channels, as in Applicant’s amended claims 5 and 14, would defeat the method disclosed in *Ramel* which is to select the code channel from data bits to be transmitted (*Ramel*, col. 6, Ins. 25-28). *Ramel* selects codes using data in an incoming data packet, and if the scrambler in *Chen* were used, *Ramel* would have to change the way it selects the codes from its pre-determined code selection plan using incoming data. Thus, there is no motivation to combine the scrambling means of *Chen* to modify the manner of code selection disclosed in *Ramel*. Even to do so would require that the code selection method disclosed in *Ramel* be significantly modified and/or portions eliminated to function.

Applicant claims in amended claim 12, “. . . modulating the received data in accordance with a code channel selection signal that is determined in accordance with the scrambled first subset of bits . . . for transmission at a frequency determined in accordance with a selection signal that is determined in accordance with the scrambled second subset of bits.”

Reviewing the disclosures in *Ramel* and *Chen* stated above, it is clear that the scrambling subsets of bits and using these scrambled subsets of bits to determine a code channel selection signal and/or a carrier frequency selection is not taught nor suggested. There is no motivation to combine the disclosure in *Ramel* with the disclosure in *Chen*, for such a combination would require modifying the use of the incoming packet data for frequency and code selection by the scrambler in *Chen* and further, *Chen* makes no mention of using the scrambler except to scramble all the data to be transmitted.

Applicant claims in amended claim 15, “. . . selecting a carrier frequency in accordance with the modulated, scrambled subset of bits . . .” and in amended claim 16, “determining a code channel selection signal in accordance with the scrambled subset of bits . . .”

Per the disclosures in *Ramel* and *Chen*, as stated above, it is clear that neither *Ramel* nor *Chen* disclose scrambling subsets of bits and using these scrambled subsets of bits to determine neither a code channel selection signal nor a carrier frequency selection. There is no motivation to combine the disclosure in *Ramel* with the disclosure in *Chen*, for such a combination would require modifying the use of the incoming packet data for frequency and code selection in *Ramel* with the scrambler in *Chen* in the manner claimed in Applicant's claims 15 and 16. Further, *Chen* makes no mention of using the scrambler except to scramble all the data to be transmitted.

The Examiner has rejected claims 15 and 16 under 35 USC §103(a) as being unpatentable over *Ramel* and *Chen* and further in view of Langberg et al. (US 5,582,630).

The Examiner states that one skilled in the art would have clearly recognized that the method of *Ramel* and *Chen* would have been implemented in software. It is

Applicant's position that the amended claims and the new claims are not taught nor suggested by Ramel and/or Chen and that the obviousness of *Langberg* is now moot.

Applicant has canceled claims 8 - 9 and added new claims 17-19. Applicant has amended and added claims as a matter of expedience and to more particularly point out the features of the invention.

New claims 17-19 are neither anticipated nor rendered obvious by *Ramel* and/or *Chen*, for the reasons and explanations provided above with respect to the amended claims.

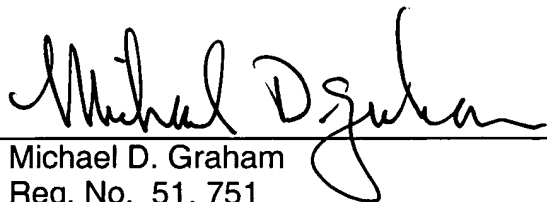
REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Applicant has added no new matter. Accordingly, reconsideration and allowance of this application is earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 28 February 2003

By:



Michael D. Graham
Reg. No. 51, 751
Attorney for Applicant

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 658-5877
Facsimile: (858) 658-2502